PROVIDENCE SEWAGE TREATMENT SYSTEM,
Ernest Street Pumping Station, Boiler House
Ernest Street and Allens Avenue
Providence
Providence County
Rhode Island

HAER No. RI-20-C

HAER RI 4-PROV, 1910-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD Mid-Atlantic Region Department of the Interior Philadelphia, Pennsylvania 19106

HAER RI 4-PROV, 191C-

HISTORIC AMERICAN ENGINEERING RECORD PROVIDENCE SEWAGE TREATMENT SYSTEM: Ernest Street Pumping Station, Boiler House

HAER NO. RI-20-C

LOCATION:

Ernest Street and Allens Avenue

Providence, Providence County, Rhod

Island

UTM:19.300780.462570 Quad: Providence, RI

DATE OF CONSTRUCTION:

1895-1896

ENGINEER:

J. Herbert Shedd

PRESENT OWNER:

Narragansett Bay Commission

44 Washington Street, Providence, RI

PRESENT USE:

Demolished 1987

SIGNIFICANCE:

As the power source for three steam engines which in turn powered sewage pumps, this structure was one of three integral elements in the Ernest Street sewage pumping station built in 1895-6 to convey sewage to Providence's Fields

Point Plant for treatment.

DESCRIPTION:

The Ernest Street Pumping Station Boiler House is one of three structures associated with this facility, the original function of which was to pump sewage, received through an 8.5-foot intercepting sewer, through the 88-inch main leading to the treatment plant at Fields Point (see HAER NO. RI-20-A and RI-20-B). The boiler house was located directly north of the engine house and connected to it by means of a covered, enclosed passage.

The boiler house was divided into two spaces, the boiler room proper and a coal vault; a chimney was positioned outside the west wall. The boiler room itself measured 70' x 50', and the adjoining coal vault approximately 21' x 69'. Like the engine house, the boiler house had red brick walls and limestone trim, but was surmounted by a slate-clad gable (rather than hipped) roof with monitor. A chimney, set off the west side of the boiler house, was 150 feet high, octagonal in section above a 16-foot-square base. The inside flue, 5 1/2 feet in diameter, was surrounded by a ventilating flue. The chimney was topped with a 5' 10" cast iron cap lined with brick.

HISTORICAL DISCUSSION:

The boiler house at the Ernest Street Pumping Station was constructed in 1895-6, and placed in service in September 1897. It originally contained four Babcock & Wilcox boilers, two of 120 horsepower, and two of 80 horsepower. Coal for the boiler furnaces was brought by cart over a "bridge" spanning the distance from the street to the east and the roof of the coal vault, into which the coal was dumped. The coal was fed to the furnaces from a small car, running on track laid in the floor, which by means of a small turntable could move easily from the coal vault to the boilers. With replacement of the original Holly steam engines in the 1930's, the original function of the boiler house was made obsolete. The building was subsequently remodeled into a garage, for which it was used until it was demolished in 1987.

BIBLIOGRAPHY:

Pike, Lynne M. Historical Background of Ernest Street Pump Station. Ms on file at Narragansett Bay Commission, October 1985.

City Engineer, Providence. Annual Report for 1896.

PROVIDENCE SEWAGE TREATMENT SYSTEM: ERNEST STREET PUMPING STATION, BOILER HOUSE HAER NO. RI-20-C (Page 3)

Narragansett Bay Commission, Drawing Files: "Buildings for Ernest Street Pumping Station," three sheets dated August 1895; also FP-65, FP-79, FP-104, FP-146-149.

